

Appl. No.: 10/682,500
Amdt. dated 03/21/2006
Reply to Official Action of December 21, 2005

BEST AVAILABLE COPY**REMARKS/ARGUMENTS**

This Amendment is in response to the non-final Official Action of December 21, 2005, in which Claims 5-11, 14-16 and 18-39 have been indicated to be allowable. However, the Official Action rejects all of the remaining claims, namely Claims 1-4, 12, 13, 17, 40 and 41, as being anticipated by or unpatentable over the newly cited U.S. Patent No. 5,675,288 to Peyrotte et al. In response thereto, Applicants have amended allowable dependent Claims 6, 14, 21, 25, 29 and 34 into independent form, including all the limitations from independent Claim 1 and any intervening claims. Applicants therefore respectfully submit that newly independent Claims 6, 14, 21, 25, 29 and 34, as well as the claims that depend therefrom (i.e., Claims 7-11, 22, 23, 26, 28, 30-33 and 35-38), are in condition for immediate allowance.

Applicants have also amended independent Claim 1 to further clarify the claimed invention, including the limitations of allowable dependent Claims 24 and 27. Accordingly, Applicants have further cancelled dependent Claims 24 and 27, and amended the dependencies of Claim 39. As explained below, Applicants submit that amended independent Claim 1, and by dependency Claims 2-5, 12, 13, 15-20, 39, 40 and 41, are patentably distinct from Peyrotte. In view of the amendments to the claims, and the remarks presented herein, Applicants respectfully request reconsideration and allowance of all of the pending claims of the present application.

As recited by amended independent Claim 1, which is the only independent claim at issue, a method is provided for linearizing a nonlinear curve with an analog linearization circuit with digitally adjustable parameters output by a sequence controller, where the curve represents the relationship between input signals and output signals of a sensor, and an output signal (100, 110, 120) is respectively associated to each input signal. As recited, the method includes the step of adjusting the analog linearization circuit in an essentially automated way by means of the sequence controller. In this regard, one or more reference input values (200, 210, 220) are output by the sequence controller and input to the analog linearization circuit. As formerly recited by dependent Claims 24 and 27, and now recited by amended independent Claim 1, the sequence controller performs an adjustment of the analog linearization circuit by means of one or more adjusting devices. The sequence controller performs the adjustment for each pair of reference

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input/reference output values until a predetermined deviation is undershot between the actual output value (500, 510, 520) and the reference output values (400, 410, 420).

In contrast to the claimed invention, Peyrotte does not teach or suggest a method for linearizing a nonlinear curve including a sequence controller adjusting each pair of reference input/reference output values until a predetermined deviation is undershot between the actual output value and the reference output values. Peyrotte does disclose a method for linearizing a non-linear amplifier including correcting amplitude and phase non-linearity. Peyrotte does not teach or suggest, however, a method of linearizing a nonlinear curve with an analog linearization circuit with digitally adjustable parameters output by a sequence controller, the method including the aforementioned adjustment for each pair of reference input/reference output values until a predetermined deviation is undershot between the actual output value and the reference output values.

Applicants therefore respectfully submit that amended independent Claim 1, and by dependency Claims 2-5, 12, 13, 15-20, 39, 40 and 41, are patentably distinct from Peyrotte. Thus, Applicants also respectfully submit that the rejections of Claims 1-4, 12, 13, 17, 40 and 41, as being anticipated by or unpatentable over Peyrotte is overcome.

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BEST AVAILABLE COPY**CONCLUSION**

In view of the amendments to the claims and the remarks presented above, it is respectfully submitted that all of the claims are in condition for allowance. Accordingly, a Notice of Allowance is respectfully requested in due course. The Examiner is encouraged to contact Applicants' undersigned attorney to resolve any remaining issues in order to expedite examination of the present application.

It is not believed that extensions of time or fees for net addition of claims are required, beyond those that may otherwise be provided for in documents accompanying this paper. However, in the event that additional extensions of time are necessary to allow consideration of this paper, such extensions are hereby petitioned under 37 CFR § 1.136(a), and any fee required therefore (including fees for net addition of claims) is hereby authorized to be charged to Deposit Account No. 16-0605.

Respectfully submitted,


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Date